



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/397,300 | 09/15/1999 | MARKO VALO | 442-008869-U | 8581 |

7590 06/06/2003
PERMAN & GREEN
425 POST ROAD
FAIRFIELD, CT 064306232

EXAMINER

RAMOS FELICIANO, ELISEO

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2681

DATE MAILED: 06/06/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/397,300

Applicant(s)
VALO et al.

Examiner
ELISEO RAMOS-FELICIANO

Art Unit
2681



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 5, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2681

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 5, 2003 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claims 12 and 15** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. **Claim 12** recites the limitation "in data terminal equipment" in line 7. There is insufficient antecedent basis for this limitation in the claim.

The claim describes "a network element and "a mobile terminal". However, later recites "flow control in data terminal equipment" (emphasis added). It is not clear what "equipment" is being referred by the expression "in data terminal equipment". The claim will be treated on the merits as best understood.

Art Unit: 2681

5. **Claim 15** has the same problem as *claim 12* explained above. The claim will be treated on the merits as best understood.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

7. **Claims 12, 15 and 17⁸** are rejected under 35 U.S.C. 102(e) as being anticipated by Snowden et al. (US Patent Number 5,974,032).

Regarding **claim 12, 15 and 17⁸**, Snowden et al. discloses a method and apparatus for adjusting a data rate in a communication system. The system includes call receivers 2 (mobile terminal) and satellites 1 (network element) for exchanging a plurality of data units (block 420) with the call receivers, as exhibited in Figures 1 and 6-7. At least one data unit includes a bit rate indicator 460 (status bit) which is analyzed by the call receivers 2 (mobile terminal) to determine a change or adjustment in the data rate used to exchange the data units; see column 9, lines 24-67. Circuitry for providing (e.g. controller 76, Figure 5) the data unit that includes the bit rate indicator 460 (status bit) as well as circuitry for analyzing (e.g. processor 39, Figure 3) the status bit is included; see e.g. Figures 8-9, and the abstract.

Claim 18

Art Unit: 2681

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1-4, 6, and 8-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US Patent Number 6,044,067) in view of Räsänen (US Patent Number 5,966,374).

Regarding **claims 1, 3 and 11**, Suzuki discloses a mobile terminal (MS) and a method for transmission rate control; see title and abstract. A TDMA signal is divided in frames, wherein the frames are divided in time slots, e.g. 25 time slots; see column 1, lines 23 & 58-64, column 3, lines 56-67, and Figures 1-3. The transmission rate of communication between a base station and a mobile station/terminal (MS) is changed by modifying the number (amount) of time slots used; see column 4, lines 40-58. The number of time slots to be used read as a "bearer" as claimed.

The mobile terminal (MS) measures a power signal from a base station, and determines if there is a need for changing (modifying) the transmission rate, i.e., the number (amount) of time slots used; see column 17, lines 45-60. In other words, the mobile terminal (MS) detects the need for bearer modification as claimed. Two consecutive time slots ^(data units) are used as claimed; see e.g. column 4, lines 50-51 & 63.

Art Unit: 2681

The detection step could be accomplished, e.g., by a status detecting means that detects a communication status (status indications); see column 2, lines 38-47.

The mobile terminal (MS) includes transceiving means and control means as claimed; see Figures 4 and 14. The transceiving means communicate with a mobile network element, e.g. a base station A or B using the modifiable bearer explained above. The controller of the MS (control means) control the process of changing the bearer, i.e. the negotiation. See e.g. column 4, lines 40-58.

However, Suzuki fails to specifically disclose that “each data unit” includes the status and user data elements.

Räsänen discloses a TDMA data transmission method for mobile communications, wherein data is divided in frames (data units) in compliance with CCITT recommendation V.110, each frame (data unit) includes data and status bits, so that a change of status is confirmed by the presence of duplicate status elements for the advantage of protecting the control information (status bits) by repeating in two consecutive units. See FIGURE 2, column 2, line 62 to column 3, line 58, column 5, line 51 to column 6, line 52, the abstract and title.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include in “each data unit” status and user data elements for the advantage of protecting the control information (status bits) by repeating in two consecutive units.

Art Unit: 2681

Regarding **claim 2**, Suzuki and Räsänen disclose everything claimed as applied above (see rejection of *claim 1*). In addition, the frames are transmitted over the air interface; see Figure 14.

Regarding **claim 4**, Suzuki and Räsänen disclose everything claimed as applied above (see rejection of *claim 1*). In addition, the bearer modification could be lowering the transmission rate (downgrading); see column 2, line 35 & 43-44. But could also be increasing (upgrading) as suggested at column 17, lines 54-60.

Regarding **claims 6 and 9**, Suzuki and Räsänen disclose everything claimed as applied above (see rejection of *claim 1*). In addition, the status indication explained before reads as either a flow control indication or an ending indication as claimed, because the indication could be interpreted as a control of the rate flow or an end of previous transmission rate. See col. 2, lines 43-47.

Regarding **claims 8 and 10**, Suzuki and Räsänen disclose everything claimed as applied above (see rejection of *claims 1 and 6*). In addition, as explained above, two indications need to be detected. Therefore, a counter as claimed is needed for determining when the two indications are detected.

The bearer modification could be lowering the transmission rate (downgrading); see column 2, line 35 & 43-44. The downgrading step takes effect after the detection of the two indications as claimed. Hence, Suzuki meet all the claimed limitations.

10. **Claims 5 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki and Räsänen in view of the knowledge generally available to one of ordinary skill in the art.

Art Unit: 2681

Regarding **claim 5**, Suzuki and Räsänen disclose everything claimed as applied above (see rejection of *claim 1*). In addition, the type of terminal (e.g. GSM) and service (e.g. HSCSD), *inter alia*, are requirements of a particular system. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement Suzuki communication system using those particular types of terminals (e.g. GSM) and services (e.g. HSCSD) as claimed because of design choice.

Regarding **claim 7**, Suzuki and Räsänen disclose everything claimed as applied above (see rejection of *claim 6*). In addition, as explained above, two indications need to be detected. Therefore, a counter as claimed is needed for determining when the two indications are detected. Therefore, if not inherent, then obvious.

11. **Claims 13-14, 16 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Snowden et al. (US Patent Number 5,974,032) in view of Suzuki (US Patent Number 6,044,067).

Regarding **claims 13-14, 16 and 17**, Snowden et al. discloses everything claimed as applied above (see *claims 12 and 15*). In addition, it is the call receiver 2 (mobile terminal) who analyzes the bit rate indicator 460 (status bit) to determine a change or adjustment in the data rate used to exchange the data units; see step 950, Figure 9.

However, Snowden et al. fails to specify that the data rate is changed by changing the number of time slots, and that it is the mobile terminal who request such change.

As illustrated by Suzuki these are well known features for TDMA systems. Suzuki teaches that the data transmission rate between a base station (e.g. Snowden et al.'s satellite 1) and a

Art Unit: 2681

mobile station/terminal (e.g. Snowden et al.'s call receiver 2) is changed by modifying the number of time slots used; see column 4, lines 40-58. The request may be originated at the mobile terminal; see column 17, lines 45-60.

Therefore, it would have been obvious at the time the invention was made to change the data rate by changing the number of time slots and originating the change request at Snowden et al.'s mobile terminal because the system is TDMA.

Citation of Pertinent Prior Art

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Bebbee et al. (U.S. Patent Number 5,673,266) see Figure 3;

Freeburg et al. (U.S. Patent Number 6,167,079) see Figures 3-8.

Response to Arguments

13. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

14. Applicant's arguments filed on February 5, 2003 with respect to claims 12-18 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 12-18 and Snowden et al., are directed to the new limitations added to claims 12 and 15. As explained above, claims 12 and 15 include a 112, 2nd paragraph problem which makes claims 12 and 15 (also 13, 14, and 16-18 by dependency)

Art Unit: 2681

indefinite. As best understood, Snowden et al. meets the language of claims 12 and 15 as explained in the rejection above.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., newly added limitations, as underlined in the amendment filed on February 5, 2003) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

15. Any response to this Office action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314

for formal communications intended for entry, informal communications or draft communications; in the case of informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to

Crystal Park II
2121 Crystal Drive
Arlington, VA
Sixth Floor (Receptionist).

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eliseo Ramos-Feliciano whose telephone number is (703) 305-0078. The examiner can normally be reached on Monday through Thursday (first week of bi-week) and Monday through Friday (second week of bi-week) from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost, can be reached on (703) 305-4778. The fax phone number for this Group is (703) 872-9314.

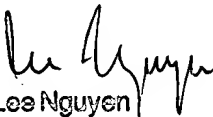
Art Unit: 2681

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700, or call Group customer service at (703) 306-0377.

ELISEO RAMOS-FELICIANO
PATENT EXAMINER

ERF/erf

May 30, 2003.


Lee Nguyen
Primary Examiner